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HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

WILLIAMS, JEFFERY L

ART UNIT PAPER NUMBER

2137

DATE MAILED: 08/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/023,887

Applicant(s)

HARRISON, KEITH ALEXANDER

Examiner

Jeffery Williams

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 September 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

This action is in response to the communication filed on 6/13/06.

All objections and rejections not set forth below have been withdrawn.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 18 and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claims 18 and 34 recite the limitation "the secret that is input by the user" in line 5. There is insufficient antecedent basis for this limitation in these claims. For the purpose of examination, the examiner will presume the applicant to mean "the secret".

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 3 – 10, 13 – 17, 19 – 26, 29 – 33, 35 – 42, 45, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khello, “Method and Apparatus for User Authentication”, U.S. Patent 5,724,423. in view of Tuneld et al., “Mobile Telephone Auto PC Logon”, WO 00/31608.**

Regarding claim 17, Khello discloses:

*a personal communication device, the personal communication device comprising a memory in which is stored a secret (Khello, fig. 3; elems. 29, 34; col. 2, line 63 – col. 3, line 11; col. 8, lines 27-46). Khello discloses memory utilized to store secrets such as a user PIN (a secret that is provided and is held for processing), encoding keys, and secret encoding algorithms.*

*and a digital device capable of communication with the personal communication device (Khello, fig. 4),*

*the personal communication device being configured whereby upon the digital device requesting a secret from the personal communication device, the personal*

1 *communication device requests confirmation from a user that the secret can be*  
2 *provided and provides the secret to the digital device only if the confirmation is provided*  
3 *by the user* (Khello, col. 1, lines 26-32; col. 6, lines 5-30).

4 Khello does not disclose that a secret is stored *prior to a user of the personal*  
5 *communication device being supplied with the personal communication device.*

6 Tuneld discloses that secrets can be stored in a memory of a personal  
7 communication device prior to a user having the personal communication device made  
8 available for use [*being supplied with*] (Tuneld, pg. 1, lines 18-26; pg. 2, lines 15-24; pg.  
9 4, lines 13-15). Herein, Tuneld discloses that a secret ("subscriber" or "identification"  
10 information which is encrypted before transmission to an authenticating system) is  
11 stored in a memory that is designed for use within a chosen mobile phone. A particular  
12 phone that a user wishes to utilize is equipped with a SIM storing a secret, and thus, the  
13 user is "supplied with the personal communication device". As explained by Tuneld,  
14 this arrangement, allows a user to authenticate herself to a system (i.e. a computer)  
15 wherein difficult to remember identification information (i.e. logon identifications,  
16 passwords, authentication codes) need not be memorized by the user.

17 It would have been obvious to one of ordinary skill in the art to employ the  
18 teachings of Tuneld within the system of Khello. This would have been obvious  
19 because one of ordinary skill in the art would have been motivated to enhance system  
20 usability by allowing users to supply pre-stored identification information for  
21 authentication instead of burdening users with the requirement to remember and  
22 manually enter difficult secrets so as to access a system or service.

Regarding claim 19, the combination of Khello and Tuneld discloses:

*in which the secret is encrypted in the memory and the digital device is capable of decrypting the secret (Khello, col. 6, lines 20-30, 47-67; col. 7, lines 17-36).*

Regarding claim 20, the combination of Khello and Tuneld discloses:

*in which the secret is encrypted according to a key provided by the digital device and in which the encrypted secret is not transmitted out to the digital device until an appropriate password is provided by the user to the personal communication device, at which time the encrypted secret is output to the digital device by way of the personal communication device (Khello, col. 7, lines 17-36; col. 8, lines 27-55; Abstract, lines 12-14).* The combination of Khello and Tuneld discloses that the user authentication service provides the personal communication device with a program for analogously deriving the identical key (thus providing a key) as well as secret encryption algorithms for encrypting the PIN. Furthermore, herein, the combination of Khello and Tuneld show that the user provides an appropriate secret before an output by the personal communication device.

Regarding claim 21, the combination of Khello and Tuneld discloses:

*in which the confirmation comprises the user providing a secret (Khello, col. 6, lines 20-30).*

1           Regarding claim 22, the combination of Khello and Tuneld discloses:

2           *in which to request the secret, the digital device is configured to establish contact*  
3           *with the personal communication device and the personal communication device is*  
4           *configured to indicate to the user that a request for a secret has been received (Khello,*  
5           *col. 5, line 57 – col. 8, line 30).*

6  
7           Regarding claims 23 and 24, the combination of Khello and Tuneld discloses:

8           *in which the indication comprises providing an audible signal and in which the*  
9           *indication comprises providing a visual signal (Khello, col. 6, lines 20-30).*

10  
11          Regarding claim 25, the combination of Khello and Tuneld discloses:

12          *in which the personal communication device is configured whereby upon receipt*  
13          *of the request the personal communication device provides to the user a selection of*  
14          *options of which at least one is to approve the request by selecting the relevant option*  
15          *(Khello, col. 8, lines 20-47; col. 9, lines 50-55). The combination of Khello and Tuneld*  
16          discloses that the personal communication device provides to the user the ability to  
17          select one from a plurality of “secrets” (secret encryption algorithms) so as to uniquely  
18          encode a PIN and then transmit the PIN to the user authentication center.

19  
20          Regarding claim 26, the combination of Khello and Tuneld discloses:

21          *in which the memory stores a plurality of secrets and the personal*  
22          *communication device is configured to provide a user with plurality of secrets from*

1 *which to select the secret to be provided to the digital device* (Khello, col. 8, lines 20-47;  
2 col. 9, lines 50-55). The combination of Khello and Tuneld discloses that the personal  
3 communication device provides to the user the ability to select one from a plurality of  
4 “secrets” (secret encryption algorithms), stored in the device memory, so as to uniquely  
5 encode a PIN and then transmit the PIN to the user authentication center.

6  
7       Regarding claim 29, the combination of Khello and Tuneld discloses:  
8       *in which the digital device is a non-cellular device* (Khello, fig. 1, elem. 20).

9  
10       Regarding claim 30, the combination of Khello and Tuneld discloses:  
11       *in which the digital device comprises a modem for communication with the*  
12 *personal communication device* (Khello, fig. 1, elem. 18; fig. 4, elem. 48). The  
13 combination of Khello and Tuneld discloses the digital device as comprising a  
14 communication device for receiving telecommunications (a “modem”) from the personal  
15 communication device.

16  
17       Regarding claim 31, it is rejected for the same reason as claim 17, and further  
18 because the combination of Khello and Tuneld discloses:  
19       *the personal communication device is configured to request confirmation from a*  
20 *user that the secret can be provided and provides the secret to the digital device only if*  
21 *the confirmation is provided by the user* (Khello, col. 6, lines 20-30). The secret is  
22 provided only when the user initiates (“confirms”) the transmission of the secret.



Regarding claim 32, it is rejected for the same reason as claims 17 and 25.

Regarding claims 1, 3 – 10, 13 – 16, 33, 35 – 42, and 45, and 46, they are the method and apparatus claims corresponding to the system claims above, and they are rejected for the same reasons.

**Claims 2, 18, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Khello and Tuneld in view of Pellerin, “Telecommunications Card-Access System”, U.S. Patent 5,497,411.**

Regarding claim 18, the combination of Khello and Tuneld discloses:  
*in which the communication capable of being established between the personal communication device and the digital device is wireless communication* (Khello, col. 5, lines 46 – 65). The combination of Khello and Tuneld discloses that users may access services using a personal communications device, wherein a secret stored in a memory of the radiotelephone is transmitted for authentication. The combination does not disclose wherein the personal communication device comprises: means for providing a quick reference descriptor for the secret [that is input by the user]; and display means for displaying the secret and the quick reference descriptor to enable the user to select an appropriate secret stored in the memory.

1           Like the combination of Khello and Tuneld, Pellerin discloses a system that  
2 enables a user to access services using a personal communications device. Memory of  
3 a personal communications device may contain a plurality of secrets, and the user may  
4 insert the memory of the personal communications device into the personal  
5 communications device and subsequently select the appropriate secret to send. The  
6 user selects the appropriate secret by selecting from a plurality of descriptors that a  
7 displayed to the user by the personal communications device (Pellerin, fig. 2; 4:5-25;  
8 5:50-67; 6:24-58). Pellerin describes that such a system (of storing a plurality of secrets  
9 on a memory of a personal communication device wherein the user may select an  
10 appropriate secret from among a plurality of displayed secrets) provides "individual  
11 users with a secure, password protected easy-to-use method of carrying and utilizing a  
12 plurality of access codes and passwords" (Pellerin, 2:59-62).

13           It would have been obvious to combine the teachings of Pellerin within the  
14 system of Khello and Tuneld. This would have been obvious because one of ordinary  
15 skill in the art would have been motivated to provide system versatility and ease of use  
16 wherein a user may utilize a single device to authenticate to a multitude of services and  
17 wherein the user may easily select the appropriate secrets necessary for such  
18 authentication.

19  
20           Regarding claims 2 and 34, they are rejected, at least, for the same reasons.  
21  
22

1  
2  
3       **Claims 11, 12, 27, 28, 43, and 44 are rejected under 35 U.S.C. 103(a) as**  
4 **being unpatentable over the combination of Khello and Tuneld in view of Hayashi**  
5 **et al., “Connection of a Mobile Wireless Terminal to a Host Computer”, GB**  
6 **2,334,682 A.**

7  
8       Regarding claims 27, the combination of Khello and Tuneld discloses using a  
9 portable radiotelephone for authenticating a user to a remote system. The combination  
10 of Khello and Tuneld does not disclose that the radiotelephone is a cellular  
11 communication device.

12       Hayashi et al. discloses using a portable radiotelephone for authenticating a user  
13 to a remote system. The portable radiotelephone of Hayashi et al. is a cellular  
14 communication device (Hayashi et al., fig. 1; page 7, line 14 – page 8, line 3).

15       It would have been obvious to one of ordinary skill in the art to employ the  
16 teaching of using cellular technology with portable radiotelephones of Hayashi et al. with  
17 the portable radiotelephone system of the combination of Khello and Tuneld. This  
18 would have been obvious because one of ordinary skill in the art would have been  
19 motivated to enhance the service provided to radiotelephone users as cellular  
20 technology would handle simultaneous connections on the same frequencies,  
21 accommodate more subscribers than would a single central antenna, provide mobile

1 users with better reception via cell switching, as well as provide numerous other  
2 benefits cellular technology has over the older central antenna radio systems.

3 Thus the combination of Khello, Tuneld and Hayashi et al., discloses:

4 *in which the personal communication device comprises a cellular communication*  
5 *device (Khello, fig. 1, elem. 12; Hayashi et al., fig. 1).*

6  
7 Regarding claim 28, the combination of Khello, Tuneld and Hayashi et al.,  
8 discloses:

9 *in which the personal communication device comprises a cellular telephone for*  
10 *voice calls (Khello, col. 5, line 57 – col. 6, line 9).*

11  
12 Regarding claims 11, 12, 43, and 44, they are the method and apparatus claims  
13 corresponding to the system claims above, and they are rejected for the same reasons.

14  
15  
16 ***Response to Arguments***

17  
18 Applicant's arguments with respect to claims 1 – 46 have been considered but  
19 are moot in view of the new ground(s) of rejection.

20  
21 Applicant's arguments filed 6/13/06 have been fully considered but they are not  
22 persuasive.

Applicants argue primarily that:

(i) *As explained in the previously-filed response, in Khello, a user ...  
Page 4, lines 24-25 of the Office Action acknowledges this distinction, but  
incorrectly refers to Tuneld for allegedly disclosing this feature. (Remarks, pg. 12)*

In response, the examiner respectfully notes that it appears the applicant's have  
misinterpreted the rejection. Page 4, lines 24-25 of the Office Action simply states that  
Khello does not disclose "that a secret is stored prior to a user of the personal  
communication device acquiring the personal communication device".  
Furthermore, as may be seen in the claim rejections, the reference of Tuneld is relied  
upon to show that a secret may be stored in a memory of a device before the device is  
available for utilization in the system to the user. The examiner finds the applicant's  
arguments to be unpersuasive.

(ii) *Page 1, lines 18-21 of Tuneld (cited in the Office Action as allegedly disclosing  
features missing in Khello) merely describes a SIM card, and says nothing about when  
information is stored in that SIM card. (Remarks, pg. 12)*

In response, the examiner respectfully points out that the Office Action also cited  
pg. 2, lines 15-24 and pg. 4, lines 14-18 of Tuneld. As is shown, Tuneld reveals that

1 information is stored in a memory of the communication device, at the very least, prior  
2 to a user adopting a communication device for utilization within the system. The  
3 examiner finds the applicant's arguments to be unpersuasive.

4  
5 (iii) *Page 2, lines 15-24 of Tuneld (cited in the Office Action as allegedly disclosing*  
6 *features missing in Khello) describes that a user is require to enter in a Personal*  
7 *Identification Number (PIN), prior to be allowed access to a computer. Like the other*  
8 *recited portion of Tuneld, this does not teach or suggest the above-mentioned features*  
9 *of the presently pending claims in which a secret is stored in a memory of the personal*  
10 *communication device **prior to a user** of the personal communication device **being***  
11 ***supplied with the personal communication device.*** (Remarks, pg. 12, 13)

12  
13 In response, the examiner respectfully points out that the Office Action also cited  
14 pg. 2, lines 15-24 and pg. 4, lines 14-18 of Tuneld. As explained in the above rejections  
15 and examiner's response, Tuneld discloses a secret stored prior to a user being  
16 supplied with the personal communication device. The examiner further points out  
17 Tuneld reveals that, before a secret stored in the SIM is allowed to be transmitted, a  
18 user must verify her authorization by entering a PIN (another secret which is also stored  
19 in the SIM) (Tuneld, 1:9 – 4:18). Additionally, the examiner finds it relevant to mention  
20 that this is the operation as described in the applicant's own disclosure, wherein a user  
21 must first enter a PIN before a secret may be transmitted to the authenticator (Instant  
22 Application, par. 48). The examiner finds the applicant's arguments to be unpersuasive.

1  
2 (iv) *Lastly, page 4, lines 14-18 of Tuneld (cited in the Office Action as allegedly*  
3 *disclosing the features missing in Khello) describes that a user inserts a SIM 120 into a*  
4 *mobile telephone. However, in the presently claimed invention, the SIM has already*  
5 *stored within it one or more secrets, prior to a user being supplied with the phone.*  
6 *Clearly, page 4, lines 14-18 of Tuneld teaches that the user has been supplied with a*  
7 *mobile phone 110, whereby the user can then insert a SIM 120 into the mobile phone*  
8 *110, and whereby the user can then presumably store information into the SIM 120*  
9 *separate from information already stored in the SIM 120 during a manufacturing*  
10 *process of the SIM 120. (Remarks, pg. 13)*

11  
12 In response, the examiner respectfully points out that the Office Action also cited  
13 pg. 2, lines 15-24 and pg. 4, lines 14-18 of Tuneld. Furthermore, the examiner  
14 respectfully asserts that the applicant has mischaracterized the reference of Tuneld.  
15 Tuneld does not disclose that a user is *supplied with a mobile phone 110, whereby the*  
16 *user can then insert a SIM... and whereby the user can then presumably store*  
17 *information into the SIM.*

18 Clearly, as the applicant demonstrates, a memory may be configured at various  
19 points in time (Instant Application, par 38 – 41). Tuneld also demonstrates that memory  
20 is able to be configured at various points in time (Tuneld, pg. 5). However, contrary to  
21 the applicant's assertions ("*the user can then presumably store information into the*  
22 *SIM*"), Tuneld merely describes such configuration of the SIM as necessary "in order for

1 a user to implement the present invention" (Tuneld, 5:1). Clearly, once a SIM is  
2 configured to store a secret, it need not then have the user [*"then presumably store*  
3 *information"*] store the secret in the SIM each time the SIM is used to authenticate the  
4 user. The examiner respectfully directs the applicant's attention to the reference of  
5 Tuneld wherein a user selects a phone, inserts a memory of the phone, and exchanges  
6 secret information contained in a memory of the phone with an authenticator (Tuneld,  
7 1:18-21; 2:19-23; 4:12-18). Tuneld does not describe that the user must select a  
8 phone, insert a SIM, program the SIM with *information ... separate from information*  
9 *already stored in the SIM 120 during a manufacturing process*, and then authenticate to  
10 an authenticator. The examiner finds the applicant's arguments to be unpersuasive.

11  
12  
13 ***Conclusion***

14  
15 The prior art made of record and not relied upon is considered pertinent to  
16 applicant's disclosure.

17  
18 ***See Notice of References Cited***

19  
20 Applicant's amendment necessitated the new ground(s) of rejection presented in  
21 this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP  
22 § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37  
23 CFR 1.136(a).



1           A shortened statutory period for reply to this final action is set to expire THREE  
2 MONTHS from the mailing date of this action. In the event a first reply is filed within  
3 TWO MONTHS of the mailing date of this final action and the advisory action is not  
4 mailed until after the end of the THREE-MONTH shortened statutory period, then the  
5 shortened statutory period will expire on the date the advisory action is mailed, and any  
6 extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of  
7 the advisory action. In no event, however, will the statutory period for reply expire later  
8 than SIX MONTHS from the date of this final action.

9           A shortened statutory period for reply is set to expire **3** months (not less than 90  
10 days) from the mailing date of this communication.

11          Any inquiry concerning this communication or earlier communications from the  
12 examiner should be directed to Jeffery Williams whose telephone number is (571) 272-  
13 7965. The examiner can normally be reached on 8:30-5:00.

14          If attempts to reach the examiner by telephone are unsuccessful, the examiner's  
15 supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone  
16 number for the organization where this application or proceeding is assigned is (703)  
17 872-9306.

Art Unit: 2137

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

J. Williams

AU: 2137

JW

  
EMMANUEL L. MOISE  
SUPERVISORY PATENT EXAMINER